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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/083,013	02/26/2002	Kazunobu Fujiwara	PW 0277041 H7625US	4298

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EXAMINER

GIESY, ADAM

ART UNIT	PAPER NUMBER
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2656

DATE MAILED: 12/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/083,013	Applicant(s) FUJIWARA ET AL.	
	Examiner Adam R. Giesy	Art Unit 2656	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8, 9, 11 and 12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8 and 11 is/are allowed.
- 6) ☒ Claim(s) 9 and 12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/17/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 9 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shim (US Pat. No. 5,970,208) in view of Tsukihashi (US Pat. No. 5,802,026) and further in view of Yanagihara et al. (hereinafter Yanagihara – US Pat. No. 6,211,800 B1).

Regarding claims 9 and 12, Shim discloses a medium reader (Figures 1-2); a first buffer memory for buffering the data read by the medium reader (element 330); a first controller for controlling the medium reader and controlling reading and writing of the first buffer memory (503); a second buffer memory for buffering the digital audio data transferred from the first buffer memory (260); a D/A converter which receives the digital audio data from the second buffer memory and D/A-converts it into analog audio signals for normal speed reproduction (element 800); and a second controller for controlling reading and writing of the second buffer memory (element 506), wherein the first controller and the second controller are connected via an interface (see arrow from element 503 to element 506 labeled 'TRANSFER' - Figure 2); data transfer between the first buffer memory and the second buffer memory is intermittently performed (this is inherent as the data that is being stored in the first buffer memory will need to be processed then stored in the second buffer in order to reproduce the digital data at all),

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said first controller control writing of the first buffer memory to be done intermittently (this is inherent as the data that is being stored in the first buffer memory must also pass through the ECC which is also controlled by the first controller, which intermittently controls the buffer memory and the ECC – see column 2, lines 52-58). Shim does not disclose that the medium reader is for reading-out digital audio data at a speed faster than the audio data reproducing rate from a medium into which the data has been recorded, or that the first buffer has a larger capacity than the second buffer.

Tsukihashi discloses an optical disc reader that is made to function at a speed higher than a normal reproduction speed (column 2, lines 15-32). Tsukihashi does not mention that the first buffer has a larger capacity than the second buffer.

Yanagihara discloses a data decoding method and apparatus for reproducing data that is encoded on an optical medium wherein the data is stored on two buffers - a larger first buffer (Figure 19, element 185) and a smaller second buffer (element 184).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the medium reader as disclosed by Shim with the reading capability as disclosed by Tsukihashi and also with the differing buffer sizes as disclosed by Yanagihara, the motivation being in order to allow for faster access of the data on the recorded medium and to provide a larger first buffer for the initial storing of data that is reproduced at the higher speed to prevent an overflow.

Allowable Subject Matter

3. The following is a statement of reasons for the indication of allowable subject matter:

Claims 8 and 11 are allowed over prior art of record.

Regarding both claim 8 and claim 11, none of the prior art of record, alone or in combination, disclose or suggest a medium reader; a first buffer memory; a first controller for controlling the medium reader and controlling reading and writing of the first buffer memory; a second buffer memory; a D/A converter which receives the digital audio data from the second buffer memory and D/A-converts it into analog audio signals for normal speed reproduction; and a second controller for controlling reading and writing of the second buffer memory, wherein the first controller and the second controller are connected via an interface, data transfer between the first buffer memory and the second buffer memory is intermittently performed, said first controller control writing of the first buffer memory to be done intermittently at a speed higher than the normal reproducing speed, and **said second controller monitors a remaining data amount in the second buffer memory, and when the remaining data amount becomes small, reads the digital audio data from the first buffer memory and writes the digital audio data into the second buffer memory.**

The closest prior art by Shim (US Pat. No. 5,970,208) discloses medium reader with two buffer memories (each with its own controller) and a D/A converter for converting digital data signals to analog data signals. Shim fails to disclose that the second controller monitors a data level in the second buffer memory and reads more data from the first buffer memory is the data level is low. Shim also fails to discuss reproducing the data at a rate faster than the normal reproducing rate.

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Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam R. Giesy whose telephone number is (571) 272-7555. The examiner can normally be reached on 8:00am- 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T. Nguyen can be reached on (571) 272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ARG 12/5/2005

ARG

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12/9/05